THE ROYAL DOCKYARDS

FUTURE ARRANGEMENTS FOR SHIP REFITTING

CONSULTATION DOCUMENT

A document outlining
for consultative purposes
the background to proposals
announced to the House of Commons
by the Rt Hon Malcolm Rifkind QC MP
the Secretary of State for Defence
on 24 June 1993

Ministry of Defence
8 July 1993

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SECTION 1

INTRODUCTION

1.1 This document sets out the Government's proposals for future arrangements for refitting the Royal Navy's warships, submarines and other vessels, and the implications for the Royal Dockyards at Devonport in Plymouth and Rosyth in Fife. It provides a basis for consultation with Ministry of Defence staff and other interested parties in order to reach a final decision.

1.2 As announced by the Secretary of State for Defence on 24 June 1993, the Government proposes:

a. to concentrate all refitting, refuelling and decommissioning work on nuclear-powered submarines at Devonport Royal Dockyard (DRD) as soon as practicable, and, subject to satisfactory negotiations, to let a contract for the construction of the facilities needed there; and

b. that Rosyth Royal Dockyard (RRD) should develop into a non-nuclear Dockyard, with an allocated programme of non-nuclear refitting work.

1.3 The aim of these proposals is to meet the Royal Navy's refitting requirements and achieve value for money.

SECTION 2

BACKGROUND TO THE PROPOSALS

Introduction

2.1 Since 1987, the two Government-owned Royal Dockyards have been commercially operated by Devonport Management Limited (DML) at Devonport and Babcock Thorn Limited (BTL) at Rosyth under seven-year Term Contracts, which have recently been extended for a further period of up to two years. The Dockyards alone are licensed, and have the necessary resources and facilities, to do all refit, refuelling and decommissioning work on Britain's nuclear-powered submarines. They also carry out most of the programme of refits and other maintenance work on the Royal Navy's non-nuclear warships, partly on a non-competitive (i.e. "allocated") basis under the Term Contracts and partly through winning competitions for the work (the Dockyards have also obtained other industrial work from non-MoD customers). The Fleet Maintenance organisations at the Naval Bases also carry out maintenance of warships based there. The rest of the planned refit work, known as the unallocated programme, is placed following open competition.

Need for new nuclear refitting facilities

2.2 Nuclear-powered submarines demand comprehensive provision for their support. While other States also have nuclear-powered submarines and support facilities for them, for strategic and security reasons and to discharge the Government's national and international obligations as a responsible nuclear operator, an indigenous support capability must continue to be provided. The Government has therefore ruled out, as a matter of policy, undertaking the nuclear work outside the UK.

2.3 At present, nuclear work is carried out at both DRD and RRD. While the existing nuclear facilities at the Dockyards fully meet the stringent nuclear safety regulations applied both by the MoD and the independent Nuclear Installations Inspectorate (NII), these facilities cannot satisfactorily accommodate the larger VANGUARD-class (Trident) SSBNs which are due to enter service over the next few years. While retaining two nuclear facilities would offer extra insurance against unforeseen problems, there are no overriding strategic considerations which preclude concentrating nuclear work at a single site. As the costs of two nuclear sites (including heavy investment at both Dockyards) would be prohibitive and could not be justified against other Defence priorities, the Government has concluded that all nuclear work should be concentrated at one site.

2.4 During the 1980s, the size of the nuclear submarine refit programme as a whole meant that all existing submarine docks at Devonport and Rosyth would be required, and work started on new docks (the RD57 project at Rosyth) for refitting Trident. With the end of the Cold War and the reduction in the size of the submarine and surface fleet, it became possible to consider new and less expensive solutions. Accordingly, in July 1991, the MoD invited DML and BTL, along with Vickers Shipbuilding and Engineering Limited (VSEL) (who build all UK nuclear-powered submarines), to make proposals for nuclear refitting work.

Development of proposals

2.5 In response, VSEL put forward proposals for undertaking Docking and Essential Defects (DEDs) (maintenance but not refits) on SSNs at its shipyard at Barrow-in-Furness. The case for SSN DEDs at Barrow was not substantiated by the VSEL proposal, which was therefore not pursued. DML proposed a programme to upgrade existing docks at Devonport and instal a new fuel handling system, and BTL proposed an integrated refitting complex for Trident (a revised version of RD57).

2.6 Since these proposals were received in November 1991, both Dockyard companies have continued to develop their proposals. DML has revised and refined its proposal for the use of upgraded docks. BTL has developed a further revision of its RD57 scheme (its New Docks Proposal), and, at the end of 1992, submitted an alternative proposal for upgrading existing docks at RRD. In support of their proposals, both contractors have provided: estimates of the capital costs for the design and construction of the nuclear facilities, together with details of construction programmes and justification of the nuclear safety aspects; programmes for conducting nuclear refits over the next 15 years; and business plan projections for both a nuclear and a non-nuclear future Dockyard. The MoD has consulted extensively with DML and BTL about their proposals, and full use has been made of specialist consultants.

2.7 Immediately prior to the Secretary of State for Defence's announcement on 24 June 1993, BTL offered a completely new suggestion for nuclear refitting. This was to reduce the number of docks where nuclear refuelling could take place from two to one and to use the Emergency Docking Facility at Rosyth as the nuclear defuelling and refuelling facility. This suggestion, which if valid could have been presented at any time during the previous six months, was received at a point when the MoD had spent several months consulting with the companies about their detailed proposals in order to make a thorough assessment of them, and after the period of consideration of the companies' proposals had already been extended in January 1993, in part to ensure that BTL was able to develop an upgrading proposal on the same basis as DML. The latest concept proposed by BTL would entail using a single nuclear refuelling facility for all nuclear submarines, giving rise to unacceptable risks in the event of an incident or other difficulty; it would also deprive Trident submarines of a dedicated emergency docking facility for significant periods; and would be untested from a technical and safety point of view. In sum, the latest BTL proposition would involve an unacceptable level of operational risk and the Government therefore concluded that it should not be considered further.

Need for two Dockyards

2.8 Under the present Term Contracts, both DRD and RRD have an allocated programme of non-nuclear as well as nuclear work. Concentrating nuclear work at one site therefore has implications for the non-nuclear refit programme. Experience has shown the benefits of effective competition for this type of work. While the private sector can compete successfully for individual ship refits, an effective overall competitive structure for non-nuclear refitting is necessary in order to provide the best value for money. In particular, the Government aims to avoid the risk of a monopolistic or near-monopolistic situation developing for refitting surface warships, with the attendant escalation of costs. Accordingly, in answer to a Parliamentary Question on 9 February 1993, the Secretary of State for Defence announced that the Government planned to continue with two Royal Dockyards.

SECTION 3

NEW NUCLEAR REFITTING PROPOSALS

Proposals for future nuclear refitting facilities

3.1 Three options for providing future nuclear facilities, based on proposals developed by the Dockyard companies, have been considered:

a. upgrading existing docks and providing new refuelling facilities at Devonport;

b. providing new docks and associated facilities at Rosyth, based on a modified version of the original RD57 concept; and

c. upgrading existing docks and providing new refuelling facilities at Rosyth.

3.2 All the proposals include the following main features: a refuelling and refitting dock for VANGUARD-class SSBNs, a refuelling and refitting dock for SSNs, an Emergency Docking Facility (EDF) for the VANGUARD-class, berthing arrangements for post-refit activities and associated nuclear engineering facilities. All the proposals assume continued use of one or more of the existing docks for nuclear work during the construction period.

Devonport upgrade

3.3 DML's proposal includes one refitting and refuelling dock for VANGUARD-class SSBNs (9 Dock), one refitting and refuelling dock for SSNs (14 Dock), an EDF for the VANGUARD-class (10 Dock), a new Low Level Refuelling Facility (LLRF) and a new Power Range Testing (PRT) berth. It assumes the continued use of 15 Dock as a nuclear refuelling facility with the existing arrangements until around the turn of the century.

3.4 To meet the demands of nuclear safety, the nuclear refuelling docks and their associated docking cradles would be modified to provide increased resistance to seismic loading from earthquakes. The existing fuel handling arrangements would be almost entirely replaced, and dockside services brought up to the latest standards. New Reactor Access Houses (RAHs) supported on bridge structures spanning each refuelling dock have been designed to enable them to be positioned directly above the reactor compartment of the submarine by moving them along the dock on rails. Fuel handling would be by a low level trolley arrangement running on ground level rails from the RAH above the submarine to a new fuel handling building (LLRF) at the north wall of 5 Basin.

3.5 9 Dock, on the opposite side of 5 Basin from 14 Dock, would become an extra licensed site. A similar rail system would link 9 Dock to the same fuel handling building, a distance of about 1200 metres from the facilities at 14 Dock.

Rosyth RD57 New Docks Proposal

3.6 As originally envisaged, RD57 was a fully integrated facility capable of supporting two streams of nuclear refitting. In November 1991, BTL proposed a Low Cost Option version of RD57; in June 1992 it submitted a reduced cost New Docks Proposal (NDP), an austere version of which was submitted in March 1993.

3.7 The NDP would use the site of the original RD57 project to provide two new reinforced concrete docks, one sized to accommodate the VANGUARD-class SSBNs (and SSNs), and one to accommodate all current SSNs. Also included in the proposal is a PRT berth. The proposal assumes the availability of the EDF at Rosyth (known as RD46) and the continued use of the existing nuclear refitting and refuelling facilities in 2 and 3 Docks with existing arrangements until the around the turn of the century.

3.8 This proposal uses dispersal of the nuclear-related buildings and services to reduce to a minimum the possible seismic interaction. The RAHs for each dock would be moved from the dock side across beams, to a position over the reactor compartment of each submarine. Nuclear engineering facilities would be isolated seismically from the docks by locating them a short distance away. Nuclear fuel would be transferred to and from them by low level fuel transfer trolleys.

Rosyth upgrade

3.9 BTL's upgrade proposal includes the provision of one refitting and refuelling dock for VANGUARD-class SSBNs (2 Dock), one refitting and refuelling dock for SSNs (1 Dock Inner) and a new PRT Berth. Also included is a new Nuclear Engineering Facility at the north end of 2 Dock with a Low Level Fuel Handling System. The proposal incorporates the existing EDF at RRD for SSBNs and assumes the continued use of 3 Dock as a nuclear refuelling and refitting facility for SSNs with existing arrangements until around the turn of the century.

3.10 The company would meet the seismic requirement by the use of seismically qualified structures for nuclear-related support buildings and services, and by demonstrating that the existing dock structures would remain stable and predictable in behaviour under such conditions without the use of stability enhancing measures. The existing fuel handling arrangements and dockside services would be almost completely replaced, with the high level fuel handling arrangements being replaced by a low level trolley system. New RAHs would be procured and would be positioned by moving them across the submarine on removable rails supported by abutments permanently constructed in the docks.

3.11 Nuclear fuel movement between the submarine and the new fuel handling building located on the spine between 1 and 2 Docks would be achieved by a rail system contained within the nuclear licensed site.

Assessment

3.12 One key aim of the assessment was to seek robust comparative prices for the Dockyard companies' capital expenditure proposals. After clarification and discussion with the companies, the terms, conditions and exclusions proposed are almost identical. Overall, a sound price comparison is possible. All offers have exclusions which place risk with the MoD. The principal item, which applies to both companies' proposals, is the cost of equipment supplied by Rolls Royce and Associates (RRA). A number of adjustments also need to be made to the prices quoted by DML and BTL to allow a like-for-like comparison of the proposals.

3.13 With regard to the Dockyard companies' fixed prices, the MoD's specialist consultants have had access to the companies' Bills of Quantity and are confident that the designs put forward by DML and BTL could be constructed within the order of the fixed prices quoted by the companies (based on those risks taken by the Dockyard companies).

3.14 A table of the relative costs of the options, taking into account the adjustments necessary to provide a like-for-like comparison, is at Annex A. These are comparative costs; they do not represent the potential total costs to the MoD of the new facilities as, for example, under the standard terms and conditions for construction contracts certain risks are not borne by the contractor.

3.15 The MoD's specialist consultants have carefully evaluated the nuclear safety aspects of all three proposals, and there have been discussions with the NII. Both the DML upgrade proposal and the Rosyth NDP have a technical and safety approach which is considered robust and is judged to offer a good prospect of timely nuclear site licensing. For the BTL upgrade, the interrelation of the construction programme, the ongoing submarine refit programme and related safety work is such that, while the proposal should meet safety standards and be licensable, greater pressure would be placed on the construction programme if facilities are to be ready in time for the first VANGUARD-class refit.

3.16 Both DML and BTL have submitted a proposed nuclear refitting programme in the light of the illustrative refit programmes provided to them on a classified basis by the MoD. The proposed programmes have been assessed for their ability to meet the refit needs of individual submarines and for programme realism and risk. All three proposals are acceptable, although there is a slightly greater risk of disruption to the submarine refit programme in the case of the BTL upgrade because of the works around 2 Dock alongside submarines in refit.

Summary

3.17 Each option is assessed to be technically feasible, fully justifiable on nuclear safety grounds to MoD and NII standards, licensable, and capable of timely accomplishment of the entire nuclear programme. There is, however, some risk of interference between the ongoing refit programme and the construction work under the BTL upgrade proposal. The difference between the options is in capital cost and, to a lesser extent, programme risk. As Annex A shows, the Rosyth NDP is some £120 million costlier than either upgrade proposal, and, of the two upgrade proposals, the BTL proposal is more costly by £12 million. While the design and construction programmes for all the proposals are taut, in the case of the BTL upgrade there is a slightly greater risk that the facilities would not be ready in time for the start of the first VANGUARD-class refit.

SECTION 4

NON-NUCLEAR REFITTING

Introduction

4.1 The proposal announced by the Secretary of State for Defence on 24 June 1993 involves moving to a situation where all nuclear work takes place at one Dockyard, and the other undertakes only non-nuclear work. This requires changes to be made at both yards.

Nuclear yard

4.2 There are inevitable fluctuations in nuclear work, which under present arrangements are smoothed as far as possible by allocated non-nuclear work. In future, the nuclear yard would not have an allocated non-nuclear programme but would have to seek non-nuclear work in competition. It would therefore need to restructure its operations to reflect this.

Non-nuclear yard

4.3 In order for the non-nuclear yard to provide successful long-term competition for surface ship refitting, it has to provide value for money to the MoD and be a viable business. To achieve this will require a successful transition to a solely non-nuclear business, in which nuclear-related costs are removed and overheads reduced to a level enabling cost-effective non-nuclear operations.

4.4 Initially, the non-nuclear yard could be vulnerable to the loss of relatively few major refits to a competitor who was prepared to undercut the non-nuclear yard's prices by bidding below his own true costs in order to try to force it out of business. Thus an allocated programme of surface ship work would be necessary for some time to enable the non-nuclear yard to complete its remaining nuclear work (which would end in 1996/7) economically, make the transition to a wholly non-nuclear business and to establish its competitive position and develop new markets.

Size and length of allocated programme

4.5 The size of allocated programme at the non-nuclear yard depends on a number of factors, such as its capacity, the extent of its existing infrastructure and the ease with which the yard can be restructured from its present cost structure. The volume of throughput required to allow cost-effective refitting with the level of overheads which remain during the rationalisation process broadly determines the level of allocated programme required (taking account of other, non-MoD, work won by the yard). At the same time, some MoD work needs to be exposed to open competition to provide an incentive for the non-nuclear yard to reduce its costs and to maintain the competitive base. There is therefore a need to provide opportunities for the other participants in the industry (private shipbuilders and repairers and the nuclear Dockyard) to compete for a proportion of the MoD's non-nuclear programme.

4.6 The long-term aim is a healthy competitive structure for non-nuclear refitting. The allocated programme for the non-nuclear yard, which will be for 12 years, has three purposes which determine its duration. First, it is a necessary complement to nuclear refitting until this is consolidated at the other yard. Second, an allocated programme up to the end of the century is necessary to complete the rationalisation required at the non-nuclear yard and enable it to reduce overheads, improve productivity and diversify into new markets. The third phase, lasting for five years, is necessary to bridge the transition from this allocated programme to a wholly competitive situation. This in turn will help the non-nuclear yard to obtain non-MoD work as well as competitively-won MoD work during the tapering of allocated work.

Details of allocated programmes for the non-nuclear yard

4.7 The resulting allocated programme for Rosyth as a non-nuclear yard comprises over half the surface warship refitting between 1993/4 and 1999/2000 inclusive. It includes all CVS and Hunt class refits, virtually all Type 42 and some Type 22 and Type 23 refits, as well as those of a large number of minor warships. The total length would be 12 years, with a tapering between 2000 and 2005. For Devonport, the allocated programme would have been broadly similar, including CVS refits, most Type 22 and some Type 23 and Type 42 refits.

Government commitment

4.8 It has been normal practice, for security reasons, that the detail of the future refitting programme is not made public, as this would enable an assessment to be made of future force levels and operational availability.

4.9 The precise timing of the future refitting programme is also subject to a number of practical uncertainties. The refitting requirement depends on the number of ships and their refitting intervals (which are also related to their weapon systems). The timing of refits also depends on the operational situation at the time, while the extent of the work required depends on the material state of the vessel concerned.

4.10 Individual refits will continue to be subject to negotiations about price on the basis of the MoD's terms and conditions for such work. However, to enable Rosyth to make a successful transition to a non-nuclear yard, the Government is committed to providing an allocated programme at Rosyth for 12 years which will consist of over half of the surface warship refitting and which will comprise, between 1993/4 and 2004/5 inclusive, the refits of 18 major surface warships, including two CVS class ships, and of 49 other vessels. The two CVS are due to be refitted within the period of the allocated programme, the first starting towards the end of this decade, as are at least two destroyers or frigates each year from 1996/7 until 2000.

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SECTION 5

FINANCIAL APPRAISAL

Introduction

5.1 A full financial appraisal has been carried out by the MoD and its specialist consultants in order to establish the comparative costs of the three options. The financial projections take into account capital costs, both those directly related to the companies' proposals and ongoing investment to maintain the infrastructure at both yards, and total operating costs associated with conducting nuclear and non-nuclear refitting work.

5.2 The MoD's financial appraisal is based on a refitting programme which reflects the force levels indicated in the 1993 Statement on the Defence Estimates; the assumption that completion of any nuclear work in the non-nuclear Dockyard beyond the expiry of the current extended Term Contracts in 1995/96 would be on the basis of current costs; both Dockyards being operated in competition as independent commercial entities; and the Naval Base operations at Portsmouth, Faslane, Devonport and Rosyth continuing in accordance with current policies.

Timescale

5.3 The financial appraisal is based on a 15-year time horizon, covering the period 1993/94 to 2007/08, by which time the capital works for the new nuclear facilities will have been completed, the necessary rationalisation taken place at the non-nuclear yard and the new arrangements become fully established.

Investment Appraisals

5.4 The investment appraisals (IAs) for each option are set out in the tables in Annex B, together with supplementary notes. The specific details of commercially sensitive information relating to capital projects or derived from business plan projections made by the Dockyard companies and the MoD's own specialist consultants are not being publicly released. Redundancy costs of the Dockyard companies' employees for which the MoD is potentially liable have been considered, and, although they do not form part of the IAs (in accordance with Treasury guidance for the preparation of economic appraisals) the estimated costs are shown "below the line" in Annex B.

5.5 The IAs have been prepared using a computer model. This model was developed by the MoD's specialist consultants and is designed to reflect the relationships between workload, the composition of the workforces and the costs incurred. These relationships were identified by the companies in their business plans and amplified in further discussion with them. The model enables future MoD-related refit costs to be projected and hence comparisons made between different options.

Overall costs

5.6 The total costings of the three options considered are summarised in the following table.

CASH (£M) OVER 15 YEARS	DEVONPORT UPGRADE	ROSYTH UPGRADE	ROSYTH NDP
Nuclear facility costs	236	248	369
Ongoing capital expenditure	316	318	319
Operating costs	4732	4782	4738
TOTAL	**5284**	**5348**	**5426**

5.7 The appraisal shows the Devonport upgrade option to be £64 million cheaper overall than the Rosyth upgrade; £12 million of this comes from the difference in nuclear facility costs (see Annex A), while the remaining £52 million difference derives from operating costs (£50 million) and ongoing capital expenditure (£2 million).

Summary

5.8 The table above shows that, despite the sums that have already been spent on RD57, the Rosyth NDP is the most expensive option, and that the Devonport upgrade proposal the least expensive. In view of the capital difference of £12 million and the overall difference of £64 million between the Devonport and Rosyth upgrade proposals, and as there were no other relevant factors that pointed decisively or conclusively to one option or the other, the Secretary of State for Defence announced on 24 June 1993 that the Government proposed, subject to satisfactory contractual negotiations, to proceed with the Devonport nuclear refitting facility proposals.

SECTION 6

IMPLICATIONS FOR MINISTRY OF DEFENCE EMPLOYEES

Introduction

6.1 This section deals with the main groups of MoD staff employed at Devonport and Rosyth who work in or provide support services to one or other Dockyard. In addition to Service personnel, industrial and non-industrial civil servants work at both Dockyards. A number of the non-industrial staff are in mobile grades - that is, their conditions of service require them to serve in various MoD establishments throughout the UK as the need arises. Details of the various departments concerned are set out in this section and a summary showing staff bearings and complements is at Annex C.

MoD staff potentially affected

6.2 Each Dockyard has a large force of Ministry of Defence Police (MDP) officers (all mobile) with civilian support staff and at Rosyth there are also some Ministry of Defence Guard Service personnel. Their area of work covers both the Dockyard and other MoD establishments in the area. At Devonport, there are 185 MDP officers and eight civilian support staff (five non-industrial and three industrial, all non-mobile). At Rosyth, there are 152 MDP officers, four civilian support staff (three non-industrial and one industrial, all non-mobile) and 28 Ministry of Defence Guard Service staff (all non-industrial and non-mobile).

6.3 At each Dockyard there is a Superintendent Ships organisation, whose function is to act as the Customer Agent for all refits and DEDs at the respective Dockyard, ensuring that each project is completed to time, quality and cost, in accordance with the contract specification, and, in the case of DRD, to ensure timely capital investment to maintain the Dockyard infrastructure (at RRD this responsibility rests with DFS(MWR) (see paragraph 6.4)). At DRD, the Superintendent Ships organisation comprises 121 civilians (all non-industrials, of whom 93 are mobile and 28 non-mobile) and 16 Service personnel. At RRD, the Superintendent Ships organisation comprises 80 civilians (77 non-industrials, of whom 56 are mobile and 21 non-mobile, and three industrials, all non-mobile) and nine Service personnel.

6.4 At RRD, the Directorate of Fleet Support (Major Works at Rosyth) (DFS(MWR)), which is responsible for the project management of major works projects (both nuclear and non-nuclear) at RRD, consists of 39 civilians (37 non-industrials, of whom 32½ are mobile and 4½ non-mobile, and two industrials, both non-mobile) and one Service officer. At DRD, such responsibilities fall to the Superintendent Ships organisation there.

6.5 The Director of Fleet Support (Ships) Contracts (DFS(S)C) has a total of 20 non-industrial staff at the Dockyards responsible for negotiating and placing contracts with local industry on behalf of the local Naval Base Commander, as well as for the core refit and maintenance programme at the Dockyards. At DRD there are nine staff, of whom five are mobile and four non-mobile; at RRD, there are ten staff, of whom five are mobile and five non-mobile.

6.6 The Principal Directorate of Pricing and Quality Services (PD/PQS), which provides cost and quality engineering services, has a total of 79 staff at the Dockyards. At DRD there are 49 civilians, all non-industrial, of whom 41 are mobile and eight non-mobile. At RRD, there are 30 civilians, all non-industrial, of whom 26 are mobile and four non-mobile.

6.7 The Directorate of Naval Shore Telecommunications (DNST) has a total of 86 staff at the Dockyards, who provide a range of telecommunications services (they also support the associated Naval Bases). At Devonport, there are 61 staff (29 non-industrials, of whom 26 are mobile and three non-mobile, and 32 industrials, all non-mobile). At Rosyth, there are 25 staff (6 non-industrials, all mobile, and 19 industrials, all non-mobile).

6.8 The Director-General Supplies and Transport (Naval) (DGST(N)) has a total of 47 staff directly involved in support of the Dockyards. At each Dockyard, there is a Dockyard Liaison Group, which is responsible for the supply of Contractor Supplied Material to the Dockyards within the terms of Purchasing Agreements between the contractors and the MoD. These staff are functionally responsible to the Principal Supply and Transport Officer (Naval) (PSTO(N)) at the associated Naval Base, but work in the Dockyard. At DRD, there are 29 staff, all non-industrials, of whom five are mobile and 24 non-mobile; at RRD there are 18 staff, all non-industrials, of whom three are mobile and 15 non-mobile.

6.9 Both Dockyards run Apprentice Training schemes, both to meet their own needs and for a number of MoD departments. There are currently 24 MoD employees under apprentice training at DRD, and 26, including two for the Defence Research Agency, at RRD.

6.10 At Rosyth, the Naval Base provides (under contract) an Occupational Health Service exclusively for the Dockyard. This organisation consists of two RN officers and 12 civilians, all non-industrial (of whom four are mobile and eight non-mobile). At Devonport, this service is also provided by the Naval Base under contract to the Dockyard, by an organisation consisting of two RN officers and 21 civilians (all non-industrial, of whom ten are mobile and eleven non-mobile), who devote some 60% of their time to Dockyard business.

6.11 At Rosyth Naval Base, there is a Base Nuclear Safety Agency, which, while located in the Naval Base, deals exclusively with the nuclear-powered submarines (in refit or decommissioned) at the Dockyard. This organisation is made up of three RN officers and 12 civilians (ten non-industrials, of whom seven are mobile and three non-mobile, and two industrials, both non-mobile). A similar organisation exists at Devonport Naval Base; it comprises nine RN officers and 21 civilians (all non-industrial, of whom 16 are mobile and five are non-mobile), who devote some 60% of their time to Dockyard business.

6.12 The Sea Systems Controllerate has staff at each Dockyard involved in setting weapon systems to work. Three are at DRD of whom two are non-industrial and mobile civilians, and one a Service officer; at RRD there are three civilians (all non-industrial, of whom two are mobile and one non-mobile).

6.13 A large number of DGST(N) staff work within the PSTO(N) organisations at Devonport and Rosyth Naval Bases providing material support, both directly and indirectly, to the Dockyards. Material support to the Dockyards accounts for about 20% of PSTO(N) business. PSTO(N) Devonport employs 824½ civilians, of whom 313½ are non-industrials (147 mobile and 166½ non-mobile) and 511 non-mobile industrials; PSTO(N) Rosyth employs 527 civilians, of whom 227 are non-industrials (130 mobile and 97 non-mobile) and 300 non-mobile industrials.

6.14 The Director of Marine Services (DMS(N)) has staff at the Naval Base at both Devonport and Rosyth, who provide berthing and in-harbour support for warships and submarines operating in the respective Naval Bases and their adjacent sea areas, as well as undertaking other tasks such as salvage, diving and maintenance of moorings. They also provide support to the associated Dockyards, but this accounts for only about 2% of DMS(N) activity. At Devonport there are 493 civilian staff, of whom 124 are non-industrial (113 mobile and 11 non-mobile) and 369 industrial (all non-mobile). At Rosyth, there are 264½ civilian staff, of whom 63½ are non-industrial (56 mobile and 7½ non-mobile) and 201 industrials (all non-mobile).

Implications of the Government's proposals

6.15 The detailed implications of the proposals for all these groups of staff will be addressed during the planning for the implementation of the final decision. The proposals may also indirectly affect other MoD staff, but these effects are not expected to be significant. Further consultation will take place, as appropriate, as soon as possible after a final decision.

6.16 Wherever possible, alternative employment elsewhere in the MoD would be found for staff in mobile grades affected by the final decision. Every effort would also be made to place staff in non-mobile grades in other MoD jobs, or with other Government Departments in the area. There is also the possibility of being able to offer jobs outside the areas concerned to some staff in non-mobile grades.

6.17 At this stage it is not possible to state precisely how many staff within each department might be directly affected by the Government's proposals. The potential reduction in MoD posts resulting from the proposals is, however, unlikely to be more than 100 in total, and this is likely to be spread over the next few years. As much as possible of the reduction would be achieved through natural turnover and pre-redundancy measures, but redundancy cannot be ruled out. If redundancy among non-mobile staff is necessary, this would be achieved by voluntary means if possible. Any staff made redundant would have full access to the MoD outplacement and redundancy counselling service, and compensation would be paid under the appropriate regulations.

SECTION 7

IMPLICATIONS FOR ROYAL DOCKYARD EMPLOYEES

7.1 Since 1987, Royal Dockyard employees have not been MoD civil servants, and employment at the Royal Dockyards is primarily a matter for the Dockyard companies, who are free to determine the balance in their workforces between permanent employees and those retained on a short-term or casual basis. The extent to which sub-contractors are used in preference to directly employed personnel is also for the Dockyard companies' commercial judgment. In addition, the numbers employed would be affected by changes in working practices and improvements in productivity.

7.2 At 30 June 1993, based on information from DML and BTL, the permanent workforces at DRD and RRD numbered about 4,880 and 3,620 respectively. In addition, both companies make use of a considerable number of casual and temporary personnel as well as sub-contractors.

7.3 Employment estimates reflecting the Government's proposals have been produced using modelling techniques which draw on business plans submitted by DML and BTL and on discussions between the companies and the MoD's specialist consultants. This information has enabled the MoD to analyse the business processes at the Dockyards and, for a given level of work, assess the number of employees required and the costs incurred. Hence the number of employees required to execute the future refit programme resulting from the Secretary of State for Defence's announcement of 24 June 1993 can be calculated, and the overhead personnel and non-payroll costs derived. The results of this process indicate a reduction in current employment related to MoD work at the Dockyards of some 450 at Rosyth and 350 at Devonport by the turn of the century.

7.4 The timing of any reductions in employment arising as a direct result of reduced MoD work would be a matter for the Dockyard companies, but the proposed changes to refitting arrangements would be phased, and would not be fully implemented for several years. The reductions would also be offset to the extent that the Dockyards won work in competition from the Ministry of Defence or increased their non-MoD business.

SECTION 8

CONSULTATIVE PROCESS

8.1 Final decisions on future arrangements for ship refitting will take account of all the relevant factors and will be made only after a period for consultation. This document aims to provide the basis for that consultation. Views and comments from MoD staff are sought through the MoD Council of Civil Service Unions, and the Trade Union Side Secretary of the MoD Joint Industrial Whitley Council. This Consultation Document is being passed to the Dockyard companies, and is being made available to, among others, constituency Members of Parliament, local authorities, and to the local Training and Enterprise Council or local enterprise companies. Any external organisation or individual wishing to make comments should address them, making it clear that they are responses to this document, to the Assistant Under Secretary of State (Fleet Support), Room 8121, Main Building, Ministry of Defence, Whitehall, London SW1A 2HB, to arrive by 10 September 1993.

8.2 Any enquiries on particular issues that may help in preparing comments should be addressed as follows:

a. on Ministry of Defence personnel issues, to Civilian Management (Industrial Relations and Conditions) Focal Point, Room 625, Lacon House, Theobalds Road, London, WC1X 8RY; and

b. on all other issues, to the Director of Fleet Support (Future Developments), Room 213, Carpenter House, Broad Quay, Bath, BA1 5AB.

Final decision

8.3 The Government will take into account all relevant comments, and any new information, before making a final decision. Thereafter there will, as appropriate, be consultation with Ministry of Defence employees on the implementation of the decision.

ANNEX A

COMPARATIVE CAPITAL COSTS - NUCLEAR FACILITY PROPOSALS

COST ELEMENT (£M)	Devonport Upgrade	Rosyth Upgrade	Rosyth NDP
	Cash (Mar 93)	**Cash (Jan 93)**	**Cash (Jan 93)**
Dockyard Companies Fixed Price:	120.6	134.3	250.5
Cost adjustments for base date differences (Jan-Mar)	Nil	0.9	1.8
Safety Case Management (a)	Nil	3.0	3.0
MoD estimates for RRA equipment (b)	66.5	70	70
RAH Design (c)	Nil	Nil	3.5
Devonport additions (d)	3.5	Nil	Nil
Nuclear Facility Decommissioning:			
Devonport	Nil	25.0	25.0
Rosyth	25.0	Nil	15.0
RD57 Restoration:	15.0	15.0	Nil
Total cost:	**230.6**	**248.2**	**368.8**
Contingency for MoD retained risks (1)	5.5	Nil	Nil
TOTAL ASSESSMENT FOR APPRAISAL	**236.1**	**248.2**	**368.8**

(1) This is not a cost that would necessarily arise, but a contingency sum added for the purposes of the Investment Appraisal in case the uncovered contingencies should arise. The contingencies refer to potential costs resulting from ground conditions which could not reasonably have been foreseen and the costs of measures to stabilise a submarine in its docking cradle under earthquake conditions should calculation unexpectedly show this to be necessary. DML's cost proposal does not cover these risks which therefore fall to the MoD. BTL's cost proposals do cover these risks.

Notes:

a. Safety Case Management refers to the cost of fees (eg paid to the NII) for assessing safety case reports. These costs were excluded from the BTL cost proposal but not from DML's.

b. MoD estimates for RRA equipment are included as DML and BTL have yet to agree price and conditions with RRA. The DML design has reduced the scope of RRA supply and hence the cost.

c. The BTL cost proposal for Rosyth NDP did not include the unavoidable cost of design of RAHs (which is included in both upgrade proposals).

d. 15 Dock at Devonport would require limited upgrading, eg to the docking cradle; the refuelling crane between 14 and 15 Docks would need to be removed; and use made of the existing MoD-owned VANGUARD-class docking cradle.

INVESTMENT APPRAISAL

Table B1: Devonport Upgrade, Rosyth non-nuclear (£ million)

	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	15 Year Total
Operating Costs																
Devonport	134	136	115	115	108	107	110	136	110	123	93	101	99	107	95	**1,689**
Rosyth	88	99	92	80	61	67	80	59	62	62	65	62	61	55	56	**1,049**
Portsmouth/Faslane	75	79	76	75	76	77	74	75	77	77	79	78	75	76	78	**1,147**
Other	56	93	76	68	63	56	54	52	41	46	74	50	46	34	38	**847**
Total	**353**	**407**	**359**	**338**	**308**	**307**	**318**	**322**	**290**	**308**	**311**	**291**	**281**	**272**	**267**	**4,732**
Capital Expenditure																
Devonport	24	25	27	83	81	31	21	13	9	10	9	10	9	10	9	371
Rosyth	20	23	30	18	11	7	7	11	8	8	6	6	6	6	6	173
Faslane	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	**44**	**49**	**86**	**87**	**75**	**47**	**28**	**24**	**17**	**18**	**15**	**16**	**15**	**16**	**15**	**552**
TOTAL	**401**	**459**	**416**	**439**	**400**	**345**	**346**	**346**	**307**	**326**	**326**	**307**	**296**	**288**	**282**	**5,284**
Redundancy Costs	4	0	0	7	12	1	1	2	1	1	22	1	1	8	1	62

Table B2: Rosyth Upgrade, Devonport non-nuclear (£ million)

	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	15 Year Total
Operating Costs																
Devonport	135	154	103	80	78	86	79	64	65	63	66	69	85	44	61	1,232
Rosyth	87	90	85	102	118	100	116	140	102	130	99	100	99	116	99	1,583
Portsmouth/Faslane	75	79	76	75	76	77	74	75	77	77	79	78	75	76	78	1,147
Other	56	81	62	60	62	54	42	68	38	53	62	50	46	35	51	820
Total	**353**	**404**	**326**	**317**	**334**	**317**	**311**	**347**	**282**	**323**	**306**	**297**	**305**	**271**	**289**	**4,782**
Capital Expenditure																
Devonport	14	16	16	19	17	11	9	9	7	7	7	7	7	7	7	160
Rosyth	42	35	40	56	63	58	39	8	9	11	7	8	7	8	7	398
Faslane	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	**60**	**55**	**56**	**75**	**80**	**69**	**48**	**17**	**16**	**18**	**14**	**15**	**14**	**15**	**14**	**566**
TOTAL	**413**	**459**	**382**	**392**	**414**	**386**	**359**	**364**	**298**	**341**	**320**	**312**	**319**	**286**	**303**	**5,348**
Redundancy Costs	4	0	21	26	3	2	2	23	2	2	3	2	2	6	2	**100**

Table B3: Rosyth NDP, Devonport non-nuclear (£ million)

	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	15 Year Total
Operating Costs																
Devonport	134	153	104	80	76	86	79	63	65	62	67	69	83	47	62	**1,230**
Rosyth	87	88	96	111	101	99	119	137	99	123	92	95	92	111	85	**1,535**
Portsmouth/Faslane	74	80	76	75	75	76	74	76	77	77	79	78	75	76	78	**1,146**
Other	57	80	63	61	63	55	56	56	37	53	63	51	45	36	51	**827**
Total	**352**	**401**	**339**	**327**	**315**	**316**	**328**	**332**	**278**	**315**	**301**	**293**	**295**	**270**	**276**	**4,738**
Capital Expenditure																
Devonport	14	16	16	19	17	11	9	10	7	7	7	7	7	7	7	**161**
Rosyth	50	58	79	103	88	43	30	8	9	11	8	8	8	8	8	**519**
Faslane	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**68**	**78**	**95**	**122**	**105**	**54**	**39**	**18**	**16**	**18**	**15**	**15**	**15**	**15**	**15**	**688**
TOTAL	**420**	**479**	**434**	**449**	**420**	**370**	**367**	**350**	**294**	**333**	**316**	**308**	**310**	**285**	**291**	**5,426**
Redundancy Costs	4	0	20	30	5	2	3	18	3	2	7	2	2	8	12	118

Explanatory notes

Operating Costs

B1. These show the comparative costs to be borne by the MoD in having the total refit programme undertaken. Thus some costs, such as materials and profits, have been excluded as being neutral for IA purposes.

B2. At Devonport and Rosyth these costs have been derived from the companies' business plans, which have been amplified through further discussion and modified to reflect current workload assumptions. A common productivity increase has been used for all options except the NDP, where an additional step change in industrial productivity occurs in 2000/01. Also included are costs currently borne by the Dockyard companies which would fall to the MoD when the non-nuclear yard was rationalised.

B3. At Portsmouth and Faslane the work is primarily maintenance and unprogrammed work on ships and submarines base-ported there.

B4. The Other line costs are for work won in competition by the privately owned yards. Costs of this work have been calculated by multiplying the work content of major warships by a constant manweek rate; sensitivity calculations have been carried out using a manweek rate variation of 10% either way, but the resulting relative differences in option costs varied by less than £4 million from those shown.

B5. Although the costs of commercial work (non-MoD work) at Devonport and Rosyth have not been included because the IAs are concerned with the comparative costs to the MoD, the overhead values used in the IAs assume a level of commercial work which has been arrived at after discussion with the company concerned.

Capital Expenditure

B6. These include the cost of the new facility at the nuclear yard (see Annex A), ongoing capital expenditure at both Devonport and Rosyth during the 15 years, and costs of decommissioning existing nuclear facilities and restoring the RD57 site, as appropriate.

B7. The ongoing costs include sums for the refurbishment and enhancement of the existing infrastructure, provision of new machine tools and refitting equipment. They also include provision for a number of construction projects.

B8. Estimated costs for decommissioning and restoration are shown in Annex A.

B9. Costs at Faslane are for enhancement of the Floating Dock to allow some maintenance work on SSNs to continue to be undertaken in it. None of the options require capital expenditure at Portsmouth.

Redundancy costs

B10. These have not formed part of the appraisal in accordance with Treasury guidelines. However, for completeness, redundancy costs are shown below the line, the costs being based on historic data and including Annual Compensation Payments.

ANNEX C

MINISTRY OF DEFENCE EMPLOYEES SUPPORTING THE ROYAL DOCKYARDS

DEPARTMENT	DEVONPORT				ROSYTH				TOTAL
	MOBILE (NI)	NON-MOBILE		SERVICE	MOBILE (NI)	NON-MOBILE		SERVICE	
		NI	IND			NI	IND		
MDP	185 (185)	5 (5)	3 (3)		152 (136)	3 (3)	1 (1)		349 (333)
MOD GUARD SERVICE					0 (1)	28 (62)			28 (63)
DGFS(Ships)									
Sup Ships	93 (96)	28 (30)		16 (16)	56 (55)	21 (23)	3 (3)	9 (9)	226 (232)
DFS(MWR)					32½ (39)	4½ (6½)	2 (2)	1 (0)	40 (47½)
DFS(S)C	5 (6)	4 (4)			5 (5)	5 (5½)			19 (20½)
PD/PQS	41 (42)	8 (8)			26 (26)	4 (4)			79 (80)
DNST	26 (28)	3 (3)	32 (48)		6 (7)		19 (20)		86 (106)
DOCKYARD LIAISON GROUP	5 (5)	24 (25)			3 (3)	15 (15)			47 (48)
OCCUPATIONAL HEALTH SERVICE SUPPORT	10 (10)	11 (11)		2 (2)	4 (4)	8 (8)		2 (2)	37 (37)
BASE NUCLEAR SAFETY AGENCY	16 (16)	5 (5)		9 (9)	7 (7)	3 (3)	2 (2)	3 (3)	45 (45)
SSC	2 (2)			1 (1)	2 (2)	1 (1)			6 (6)
Sub Totals	388	88	35	28	293½	92½	27	15	962
Group Totals	534				428				

NOTES TO ANNEX C

1. Abbreviations: IND: Industrial, NI: Non-industrial

2. Main figures equate to bearings; figures in brackets equate to current complement; all figures are estimated as at 1 July 1993. MoD apprentices on Dockyard training schemes (paragraph 6.9) are counted as MoD employees but are in practice trained under the Dockyard scheme, and have therefore been excluded from the table.

3. PSTO(N) staff are excluded as it is not yet possible to determine the precise implications for these staff of the changes to the business conducted at the respective Dockyards, but the direct employment consequences are likely to be comparatively small and manageable within the organisations concerned.

4. DMS(N) staff are excluded from the table as the changes to the business conducted at the respective Dockyards are expected to have an insignificant effect on the Marine Services Organisation.

GLOSSARY OF ABBREVIATIONS

BTL	Babcock Thorn Limited (commercial managers at Rosyth Royal Dockyard)
CVS	Aircraft carrier
DED	Docking and Essential Defect (programmed maintenance work)
DFS(S)C	Director Fleet Support (Ships) Contracts
DGFS(S)	Director-General Fleet Support (Ships)
DGST(N)	Director-General Supplies and Transport (Naval)
DML	Devonport Management Limited (commercial managers at Devonport Royal Dockyard)
DMS(N)	Director Marine Services (Naval)
DNST	Director of Naval Shore Telecommunications
DRD	Devonport Royal Dockyard
DFS(MWR)	Director Fleet Support (Major Works at Rosyth)
EDF	Emergency Docking Facility
IA	Investment Appraisal
LLRF	Low Level Refuelling Facility
MDP	Ministry of Defence Police
NDP	RD57 New Docks Proposal put forward by BTL
NII	HM Nuclear Installations Inspectorate (part of the Health and Safety Executive)
PD/PQS	Principal Director of Pricing and Quality Services
PRT	Power Range Testing
PSTO(N)	Principal Supply and Transport Officer (Naval)
RAH	Reactor Access House
RD46	EDF at RRD
RD57	Proposed new refitting facility for nuclear-powered submarines at RRD
RRA	Rolls-Royce and Associates
RRD	Rosyth Royal Dockyard
SSBN	Nuclear-powered ballistic missile (strategic) submarine
SSN	Nuclear-powered conventionally-armed (Fleet) submarine
Type 22	Class of frigate
Type 23	Class of frigate
Type 42	Class of destroyer
VSEL	Vickers Shipbuilding and Engineering Limited

ERRATUM: Due to a typographical error in Table B1 on page 21, the run of figures in the capital expenditure sub-total line from 1993/94 to 1998/99 is incorrect. It should read as follows: 48, 52, 57, 101, 92 and 38. This error does not affect any other figures in the table.